

Patient information factsheet

Parenteral nutrition

We have written this factsheet to give you more information about parenteral nutrition. It explains what parenteral nutrition is, why you might need it and the possible risks of having it. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to a member of your healthcare team.

What is parenteral nutrition?

Parenteral nutrition, sometimes called PN or TPN (total parenteral nutrition), is a form of liquid food that is given directly into your blood stream through your veins. It contains all the nutrients and fluid your body requires for health, healing and growth, including protein, fat, glucose (for energy), electrolytes (salts), vitamins and minerals. This form of nutrition is given to people who cannot eat or absorb enough food through tube feeding formula to maintain good health.

Why do I need PN?

You may need PN if:

- your gut is slow to wake up after abdominal surgery (ileus)
- your gut is inflamed due to disease (Crohn's disease) or medication (cancer treatments)
- your gut is not long enough (short bowel syndrome)
- you have a blockage in your gut that is stopping food from passing through (obstruction)

What are the benefits of PN?

PN allows nutrition to be given even when the gut isn't working. It allows the gut to rest, for example, after surgery to the stomach or bowel so that it can heal, or if the bowel is obstructed due to disease.

How is PN given?

PN is given through a special line, known as a central venous line or catheter (a thin, flexible tube), into a large vein in your upper arm, neck or chest. The milky-coloured feed comes in a special bag and will be attached to your line via a pump. You will start off by receiving the PN over 24 to 48 hours. We may reduce this to a shorter time once your body adapts to receiving nutrition in this way.

Some lines can only be used for a short amount of time (seven to ten days), so after seven days you may need a new line in your arm called a peripherally inserted central catheter (PICC).

PN is usually delivered to the wards in the late afternoon or evening. This means we will usually change your bag in the evening. PN is set up by specially trained nurses, so not all nurses will be able to do it. Please be patient if your bag is not set up when you expect it.

How long will I need PN for?

You will stay on the PN until you are able to be given food and fluid directly into your gut either by mouth or via a feeding tube. We will usually reduce PN slowly once you start eating again.

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Will I still need to go to the toilet?

Your bowels will continue to work, but you may need to go to the toilet, or empty your stoma bag, less often than usual. You may find that you will pass poo which is quite liquid and has some mucus in it. You may also pass wee more often than usual. Please let us know so we can record this.

Will I be able to move around?

You will be able to walk around while the feed is running as the drip stand is moveable. Getting up and moving is an important part of your treatment.

If you wish to wash or shower, please speak to your nurse. You will need to look after the central venous catheter and make sure it stays dry.

Are there any risks?

Infection

Infection in your central venous catheter is the most common complication. We will check the site around your central venous catheter regularly to make sure it is kept clean. We will also check your temperature regularly. If you feel hot, sweaty, clammy, cold or shivery, tell your nurse immediately. We will temporarily stop giving you the PN until we are sure there is no infection.

Raised blood sugar levels

PN contains glucose and this may raise your blood sugar levels. We will check your blood sugar levels using a finger prick test four times a day to start with and then once a day. If your blood sugar levels increase too much, you may need insulin while you receive PN.

Blood clots

There is a risk of blood clots. We will monitor your blood pressure, heart rate and breathing regularly. Tell your nurse if you experience any worsening pain, swelling or redness around the site of your central venous catheter.

Liver and kidney function and electrolytes (salts)

Your liver or kidneys may not work as well as usual or the salts in your blood may go outside of normal levels. We will give you regular blood tests to monitor this and we will amend your PN accordingly.

What monitoring will I need?

In addition to your temperature, blood pressure, heart rate, breathing, blood sugar levels and blood, we will also check your:

- fluid balance (a record of what fluid is going in and out of your body)
- weight (we will check this regularly to make sure you are getting the right amount of fluid and calories in your PN)
- urine salts (you will need to give a urine sample so we can check you are getting the right amount of salt in your PN)

Who are the nutrition support and intestinal failure team?

The nutrition support and intestinal failure team is made up of doctors (consultant gastroenterologists and surgeons), specialist nurses, dietitians and pharmacists who have experience in managing PN. They will check your condition and work closely with your doctors to give you the care you need. Different members of the nutrition support and intestinal failure team will visit you during your time in hospital.

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Some people with long-term or life-changing conditions may need the support of a psychologist or the chronic pain team. If your team think you will benefit from additional support, they will arrange for you to be seen by a psychologist or a member of the chronic pain team. Alternatively, you can ask your team to arrange a meeting with either a psychologist or a member of the chronic pain team at any time during your stay in hospital.

Contact us

If you have any questions or concerns about PN, please speak to a member of the ward staff and they will be able to contact the nutrition support and intestinal failure team for you.

Useful links

www.pinnt.com

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For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**